STA Series Pull Tubular Solenoid — ½" Dia. x 1"

Part Number: 195202-X XX

Plunger Configurations and Anti-Rotation Flat

1 Flat face plunger without anti-rotation flat
2 60° plunger without anti-rotation flat
3 90° plunger without anti-rotation flat
5 Flat face plunger with anti-rotation flat
6 60° plunger with anti-rotation flat
7 90° plunger with anti-rotation flat

Coil AWG Number

(from performance chart below)

Stock Models:

Flat face plunger without anti-rotation flat:
195202-131
195202-134
195202-137

60° plunger without anti-rotation flat:
195202-231
195202-234
195202-237

90° plunger without anti-rotation flat:
195202-331
195202-334
195202-337

Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously[1]	∞	50	5	2
Maximum ON Time (sec) for single pulse[2]	∞	140	30	8
Watts (@ 20°C)	4	8	16	40
Ampere Turns (@ 20°C)	497	704	994	1,573

Coil Data						
awg (XX)[3]	Resistance (@20°C)	# Turns[4]	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
27	1.43	306	2.4	3.4	4.8	7.6
28	1.95	342	2.8	3.9	5.6	8.8
29	3.84	508	3.9	5.5	7.8	12.4
30	5.29	572	4.6	6.5	9.2	14.5
31	9.56	795	6.2	8.8	12.4	19.6
32	16.54	1,068	8.1	11.5	16.3	25.7
33	22.60	1,194	9.5	13.4	19.0	30.0
34	37.41	1,547	12.2	17.3	24.0	39.0
35	60.71	1,976	15.6	22.0	31.0	49.0
36	96.19	2,475	19.6	28.0	39.0	62.0
37	149.93	3,060	24.5	35.0	49.0	77.0

[1] Continuously pulsed at stated watts and duty cycle

[2] Single pulse at stated watts (with coil at ambient room temperature 20°C)

[3] Other coil awg sizes available — please consult factory

[4] Reference number of turns

Specifications

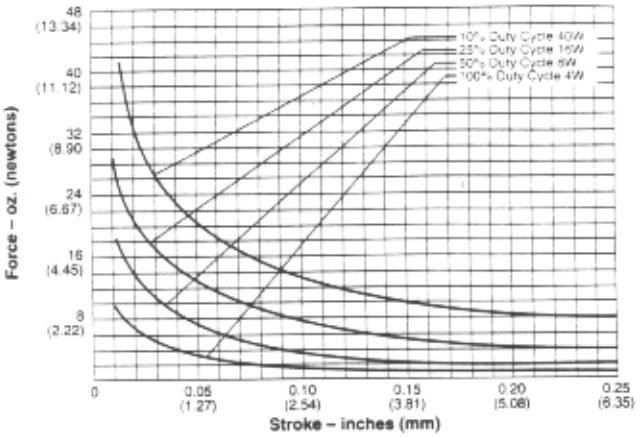
Dielectric Strength	500 VRMS
Recommended Minimum Heat Sink	Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminum plate measuring 2" square by 1/8" thick
Coil Resistance	±5% tolerance
Holding Force	Flat Face: 1.18 lb (5.25 N) @ 20°C 60°: 0.90 lb (4.00 N) @ 20°C 90°: 1.04 lb (4.63 N) @ 20°C
Weight	0.87 oz (22.1 gms)
Plunger Weight	0.16 oz (4.06 gms)
Dimensions	See page E21

How to order:

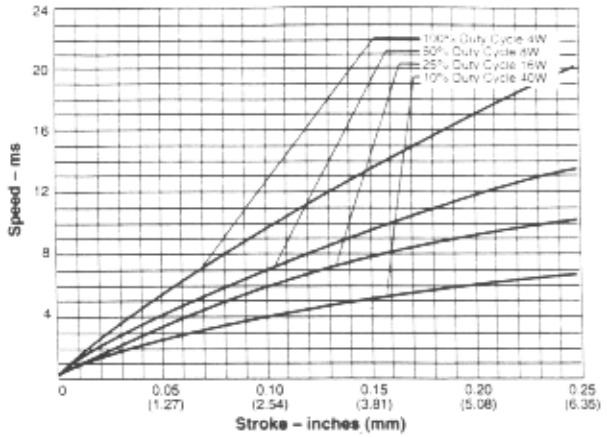
Add the plunger configuration, anti-rotation flat number, and the coil awg number to the part number (for example: to order a unit with a 60° plunger configuration without an anti-rotation flat rated for 5 VDC at 25% duty cycle, specify 195202-227; to order the same unit but with a 90° plunger, specify 195202-327.).

Pull Tubular Solenoid – ½" dia. x 1" – Flat Face Plunger

Typical Force @ 20°C

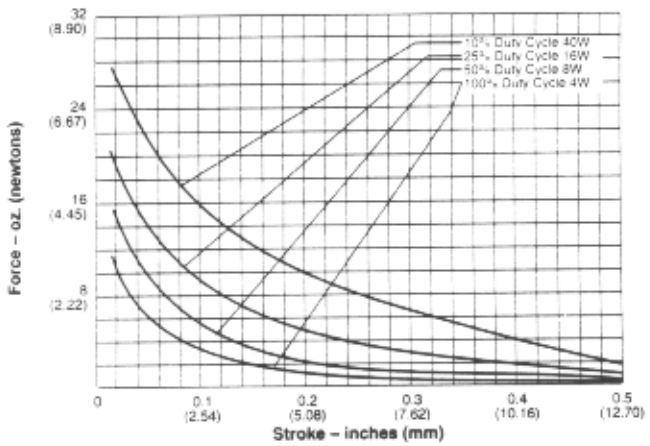


Typical Speed @ No Load, 20°C

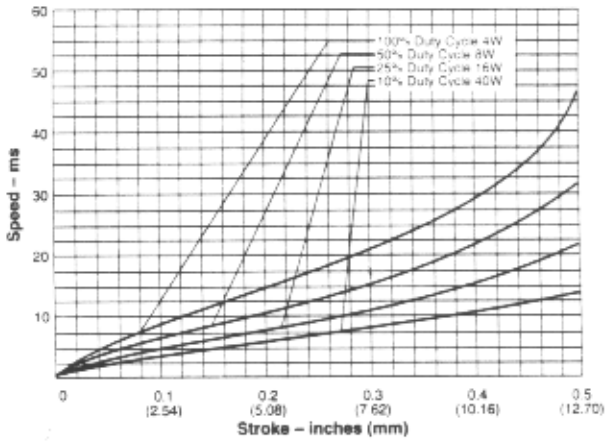


Pull Tubular Solenoid – ½" dia. x 1" – 60° Plunger

Typical Force @ 20°C

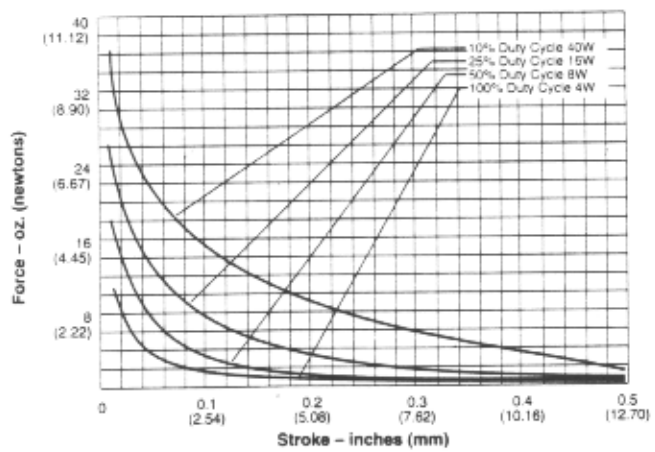


Typical Speed @ No Load, 20°C

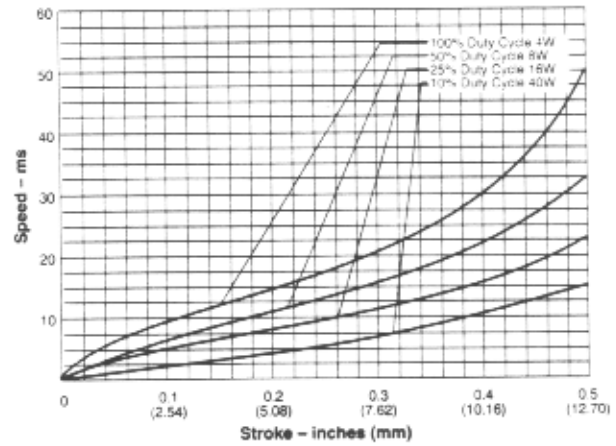


Pull Tubular Solenoid – ½" dia. x 1" – 90° Plunger

Typical Force @ 20°C



Typical Speed @ No Load, 20°C

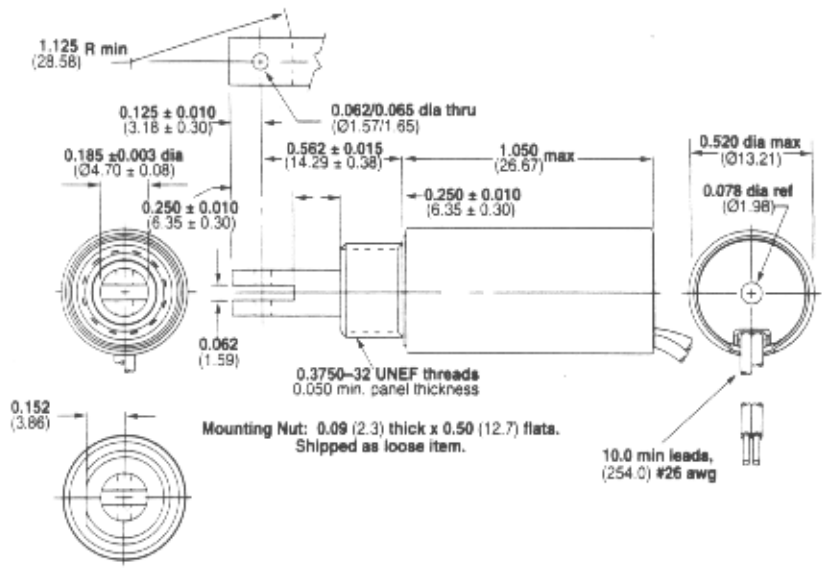


Tubular Dimensions

inches (mm)

All solenoids are illustrated in energized state

STA Series Pull — ½" Dia. x 1"



STA Series Push — ½" Dia. x 1"